78455 -Access DB#\_\_\_\_\_

#### SEARCH REQUEST FORM

#### Scientific and Technical Information Center

Requester's Full Name: 27  Art Unit: Phone Nu		Examiner #: $\rightarrow \rightarrow ::$ Date	: 10 bek
Art Unit: Phone Nu	ımber 30 <u> </u>	Serial Number: 27/3	37.363
Mail Box and Bldg/Room Location:	Resu	Its Format Preferred (circle): PAP	ER DISK E-MAII
ーラットピール If more than one search is submit	ted, please prioritiz	e searches in order of need.	*****
Please provide a detailed statement of the se Include the elected species or structures, key utility of the invention. Define any terms th known. Please attach a copy of the cover sh	earch topic, and describe a words, synonyms, acron at may have a special me	is specifically as possible the subject ma yms, and registry numbers, and combine aning. Give examples or relevant citation	tter to be searched. with the concept or
Title of Invention:  Inventors (please provide full names):	in thet	1 2 2500	<u> </u>
Inventors (please provide full names):	Prie	you it it	(6)
Earliest Priority Filing Date:	12/12/00		
*For Sequence Searches Only* Please include appropriate serial number.			umbers) along with the
25)	45,7	2 53 IDA 16, 9,10, 42,43	lus :
		50 NT.	
Point of Contact: Thomas G. Larson, Ph.D. 703-308-7309 CM1, Rm. 6 B 01		1	le l
**************************************	Type of Search	Vendors and cost where a	pplicable
Searcher: Point of Contact:	NA Sequence (#)	STN	
Thomas G. Larson, Ph.D. Searcher Phone #:	AA Sequence (#)	Dialog	
Searcher Location: CM1, Rm. 6 B 01	Structure (#)	Questel/Orbit	
Date Searcher Picked Up: 12/25	Bibliographic	Dr.Link	
Date Completed: 10/30	Litigation	Lexis/Nexis	
Searcher Prep & Review Time:	Fulltext	Sequence Systems	
Clerical Prep Time:	Patent Family	WWW/Internet	
Online Time: 30	Other	Other (specify)	
<del></del>		•	

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Title:
Perfect score:
Sequence:
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                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                              Database
                                                                                                                                                                                                                                                                                                                                    Minimum DB
Maximum DB
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!:
                                                                                                                                                                                                                                                                                                                                    seq
seq
                                                                                                                                                                                                                                                                                                                                    length: 0 length: 50
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Copyright (c) 1993 - 2002 Compugen Ltd.
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gb_est2:*
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            em_gss_hum:*
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pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

		æ				
Result No.	Score	Query Match	Length	DB	ID	Description
c 1	9	100.0	6	2	BG927410	Bg927410 HNC1-1-G7
2	6	100.0	10	9	AW672604	AW672604 llf Expla
ი 3	6	100.0	13	10	вм399550	вм399550 5009-0-59
4	0	100.0	16	o	AA968729	AA968729 or69h11.s
ი 5	σ	100.0	16	9	AI075064	AI075064 ou61gl1.x
ი ი	0	100.0	16	9	AI094839	AI094839 ga22c08.x
c 7	6	100.0	16	9	AI274782	
89	6	100.0	16	9	AI560058	AI560058 tq38hll.x
c 9	6	100.0	16	9	AI569544	AI569544 to28d10.x
10	6	100.0	18	9	AW250267	AW250267 2821151.5
c 11	6	100.0	18	10	BG896958	BG896958 HOA59-1-D
c 12	6	100.0	18	10	BG925569	BG925569 HNC5-1-E2
c 13	6	100.0	19	9	AA885444	
14	6	100.0	19	9	AA918795	
15	6	100.0	19	9	AA934650	AA934650 oo71d10.s
c 16	6	100.0	19	9	AI251781	AI251781 qu76g01.x
c 17	6	100.0	19	9	AI360784	AI360784 qx98g07.x

C 44 C 45	c 39 c 41			c c 28 c 30	21 22 23 24 25 26 27	18 19 c 20
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AZ / 86308 AZ 807034 AZ 835034 AZ 842379	AZ760597 AZ762504 AZ783420	AZ597219 AZ654214 AZ656937 AZ759944	AZ512762 AZ579189 AZ595016	AZ445563 AZ447248 AZ447414 AZ510143	A18114/4 A2307462 A2324165 A2345792 A2345792 A2412553 A2418201 A2443948	AI648553 AI696833 AI758301
AZ807034 AZ807034 AZ835034 AZ842379	AZ760597 AZ762504 AZ783420	AZ597219 AZ654214 AZ656937 AZ759944	AZ512762 AZ579189 AZ595016	AZ445563 AZ447248 AZ447414 AZ510143		
2M0069B05 1 2M0129K04 2M0140N17	_	1M0411K23 1M0528H13 1M0532K13 1M0553010		1M0241P18 1M0244H23 1M0244L06 1M0354P21		tz55e07.x wc74e09.x ty06a07.x

### ALIGNMENTS

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RESULT 1
BG927410/c
                                                                                                                                              MEDLINE; 21482651.

PUBMED; 11597177.

Kumar S., Connor J.R., Dodds R.A., Halsey W., Van Horn M., Mao J., Sathe G.M., Mui P., Agarwal P., Badger A.M., Lee J.C., Gowen M., Lark M.W.; Sathe G.M., and initial characterization of 5000 expressed sequenced tags (ESTs) each from adult human normal and osteoarthritic cartilage cDNA libraries";
                                                                                                                                                                                                                                                                      Homo sapiens (human)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                         EST.
                                                                                                                                                                                                                                                                                                                                               HNC1-1-G7.R HNC (Human Normal Cartilage) Homo sapiens cDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                        09-JUN-2001
14-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                     BG927410;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             BG927410
                    Tel: 610-270-7245
Fax: 610-270-5598
Email: sanjay_kumar-1@gsk.com
Seg primer: T7.
                                                                                                                                                                                                                                                                                                                                                                                                             BG927410.1
Key
                                                                                                                                  Osteoarthritis Cartilage 9(7):641-653(2001).
                                                                       709 Swedeland Road,
                                                                                   GlaxoSmithKline
                                                                                              UW2109
                                                                                                           Contact: Sanjay Kumar
                                                                                                                                                                                                                                                                                                                                                                                                                                                             standard; RNA; EST; 6 BP.
                                                                                                                                                                                                                                                                                                                                                                        (Rel.
 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                         69,
                                                                         P.O. Box 1539, King of Prussia, PA 19406, USA
                                                                                                                                                                                                                                                                                                                                                                        Created)
Last updated, Version 2)
                                                                                                                                                                                                                                                                                        Mammalia;
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COMMENT
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AW672604
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Plisov,S.Y., Ivanov,S.V., Yoshino,K., Dove,L.F., Plisova,T.M., Highnbotham,K.G., Karawanova,I., Lerman,M. and Perantoni,A.O. Mesenchymal-epithelial transition in the developing metanephric kidney: gene expression study by differential display Genesis 27 (1), 22-31 (2000)
                                                                                                                                                                                                                                                                              FORWARD: ctcgagatgcacg
BACKWARD: ttaagctttttttttc
Insert Length: 460 Std Erro
                                                                                                                                                                                                                                                                                                                                                              Tel: 301 846 1242 Fax: 301 846 4956
                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Plisov S.Y.
Laboratory of Comparative Carcinogenesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AW672604 10 bp mRNA linear EST ZO-SEF-ZUUJ
11F Explanted metanephric mesenchyme induced to differentiate into
epithelial structures of the nephron ex vivo. Rattus norvegicus
cDNA similar to similar to: ref[NM_004844.1|| Homo sapiens
SH3-domain binding protein 5 (BTX-associated) (SH3BP5), mRNA, mRNA
                                                                                                                                                                                                                                           POLYA-Yes.
                                                                                                                                                                                                                                                                   Seq primer: SP6
                                                                                                                                                                                                                                                                                                                                 PCR PRimers
                                                                                                                                                                                                                                                                                                                                                                                                           National
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Norway rat.
Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rattus
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   /note-"Organ: Kidney; Vector:
Restriction Enzymes 1; ApaI, A
NotI, SacII, and EcoRI SpeI, E
SalI, NdeI, SacI, BstXI, and N
                                                                              /tissue_type="Metanephric mesenchyme"
/cell_type="Mesenchymal/Epithelial"
/dev_stage="13_dpc-16dpc"
                                                                                                                                           differentiate into epithelial
                                                                                                                                                    /organism="Rattus norvegicus"
/db_xref="taxon:10116"
/clone_11b="Explanted metanephric mesenchyme
                                                                   /lab_host="JM109"
                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /db_xref="taxon:9606"
/note="Vector: pSPORT I; Site_1: SalI; Site_2: NotI;
Directional"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/clone_lib="HNC (Human Normal Cartilage)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /tissue_type="cartilage"
/lab_host="E.coli DH10 B"
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Pred. No. 2.2e+
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                : pGEM-TEASY (Promega).;
AatII, SphI, NcoI, BstZI,
EcoRI, NotI, BstZI, PstI,
    NsiI cDNA fragment
                                                                                                                                           structures
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                                                                                                                                        the nephron
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              human.
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1 GGGAGG 6
                                               AA968729 16 bp mRNA linear EST 27-AUG-1998 or69h11.sl NCI_CGAP_GC3 Homo sapiens cDNA clone IMAGE:1601157 3' similar to SW:PRPE_HUMAN 902811 BASIC PROLINE-RICH PEPTIDE P-E
AA968729.1
                    AA968729
                                  Contains element MSR1 repetitive element ;,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seq primer: T3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Molecular Genetics and Cell Biology
University of Chicago
920 E. 58th Street, Chicago, IL 606:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ,J. and Klobutcher,L. EST from Tetrahymena thermophila, strain CU428.1, growing cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Turkewitz, A.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tetrahymena thermophila
Eukaryota; Alveolata; Ciliophora; Oligohyme
Hymenostomatida; Tetrahymenina; Tetrahymena
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: apturkew@midway.uchicago.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tel: 773 702 4374 Fax: 773 702 3172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Turkewitz AP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BM399550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5009-0-59-c05.t.1 Chilcoat/Turkewitz cDNA (large fraction)
                                                                                                                                                                                                                                                                                           Similarity
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a
                                                                                                                                                                                                                                                                                                                                                          /clone_lib="Chilcoat/Turkewitz cDNA (large fraction)"
/note="Vector: BlueScript2 SR+; Details on library
preparation can be found in Chilcoat and Turkewitz (2001)
Proc. Natl. Acad. Sci USA, 98: 8709-8713."
6 c 5 g 2 t
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Tetrahymena thermophila"
/strain="CU428.1"
/db_xref="taxon:5911"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
GI:3143909
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AI075064/c
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1 (bases 1 to 16)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
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Tissue Procurement: Christopher A. Moskaluk, M.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AI075064 16 bp mRNA linear EST 27-AUC ou61g11.x1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1632356 similar to TR:Q24348 Q24348 FIBRILLARIN ;, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Seq primer: -40m13 fwd. ET from Amersham
High quality sequence stop: 1.
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                                               Emmert-Buck, M.D., Ph.D.
                                                                                                                         Contact: Robert Strausberg, Ph.D.
                                                                                                                                              Unpublished (1997)
                                                                                                                                                                                                NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP).
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                                                                       Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael
                                                                                                    Email: cgapbs-r@mail.nih.gov
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cDNA Library Arrayed by: Greg Lennon, Ph.D
                       cDNA Library Preparation: M. Bento Soares, Ph.D.
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/clone="IMAGE:1601157"
/clone_lib="NCI_CGAP_GC3"
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/lab_host="DH10B"
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FEATURES

Trace considered overall poor quality Seq primer: -40m13 fwd. ET from Amers

Amersham

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Location/Qualifiers

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NCI/NINDS-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute / National Institute of Neurological
Disorders and Stroke, Brain Tumor Genome Anatomy Project
(CGAP/BTGAP), Tumor Gene Index
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Insert Length: 712 Std Error: 0.00
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Location/Qualifiers
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                            CDNA Library Arrayed by: Greg Lennon, Ph.D.

DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                  Tissue Procurement: David N. Louis, M.D., Myrna R. Rosenfeld M.D.,
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www-bio.llnl.gov/bbrp/image/image.html
                                                                                                                                                 cDNA Library Preparation: M. Bento Soares, Ph.D., M. Fatima
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/clone="IMAGE:1632356"
/clone_lib="NCI_CGAP_Br2"
/sex="female, pooled"
/tissue_type="breast"
/lab_host="DH10B"
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High quality sequence stop: 1.
Location/Qualifiers
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DNA Sequencing by: Washington University Genome Sequencing Center Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
www-bio.llnl.gov/bbrp/image/image.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tumor Gene Index
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Emmert-Buck, M.D., Ph.D.
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National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
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Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.75 kb. Life Technologies catalog #:
11538-014"
                                                                                 /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:1986677"
/clone_1ib="NCI_CGAP_Ut1"
/tissue_type="well-differentiated endometrial adenocarcianoma, 7 pooled tumors"
/lab_host="DH10B"
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/clone_11b="NCI_CGAP_Brn23"
/tlssue_type="0110blastoma (pooled)"
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Best Local
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CDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Emmert-Buck, M.D., Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.
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National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
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Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                   adenocarcinoma,
                                                                                                                                                                                                                    /lab_host="DH10B"
/note="Orac"
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/clone_lib="NCI_CGAP_Ut1"
/tlssue_type="well-differentiated endometrial
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Email: cgapbs-r@mail.nlh.gov
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.
Emmert-Buck, M.D., Ph.D.
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DNA Sequencing by: Washington University Genome Sequencing Center Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.B. Consortium/LLNL at:
www-bio.llnl.gov/bbrp/image/image.html
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT
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/db_xref="taxon:9606"
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Email: cgapbs r@mail.nih.gov

Tissue Procurement: DCTD/DTP cDNA Library Preparation: Ling
Tissue Procurement: DCTD/DTP cDNA Library Arrayed by: The I.M.A.G.E.
Hong/Rubin Laboratory cDNA Library Arrayed by: The I.M.A.G.E.
Consortium (LLNL) DNA Sequencing by: Berkeley MGC sequencing
project Clone distribution: MGC clone distribution information can
be found through the I.M.A.G.E. Consortium/LLNL at:
www-bio.llnl.gov/bbrp/image/image.html Base Calling / Quality
Scores: PHRED from University of Washingtion Genome Center
Trimming: cross_match from University of Washingtion Genome Center
PHRAP suite. Poly-T Identification: patMatch.pl from Berkeley
Drosophila Genome Project. University of Washingtion Genome Center:
http://www.genome.washington.edu Low Quality Sequence: 16
contiguous PHRED high quality bases following vector sequence. Very
Low Quality Sequence: Trace file contained 18 contiguous distinct
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Other_ESTs: 2821151.3prime
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                                                                   Identification and initial characterization of 5000 expressed sequenced tags (ESTs) each from adult human normal and osteoarthritic cartilage cDNA libraries Osteoarthritis Cartilage 9 (7), 641-653 (2001)
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UW2109
                  Contact: Sanjay Kumar
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/clone="IMAGB:2821151"
/clone_1ib="NIH_MGC_7"
/tissue_type="small cell carcinoma"
/cell_line="MGC3"
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Tel: 610-270-7245
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                                                                                                                                                                                                                                                                                                                                                                            Email: sanjay_kumar-l@gsk.com
Seq primer: T7.
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Seq primer: T7.
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/db_xref="taxon:9606"
/clone_lib="HNC (Human Normal Cartilage)"
/tissue_type="cartilage"
/lab_host="E.coli DH10 B"
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/lab_host="E.coli DH10 B"
/note="Vector: pSPORT I; Site_1:
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                                                                                                   repetitive element ;, mRNA sequence. AA918795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL;
IMAGE Consortium (info@image.llnl.gov) for further i
Trace considered overall poor quality
Possible reversed clone: similarity on wrong strand
Insert Length: 489 Std Error: 0.00
Insert Length: 489 Std Error: 0.00
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Eukaryota;
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National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
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Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index
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                                                                                                                Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                          NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anat
                                                                      Emmert-Buck, M.D., Ph.D
                                                                                            Tissue Procurement: Christopher A. Moskaluk, M.D., Ph.D., Michael
                                                                                                                                                              Unpublished (1997)
cDNA Library Preparation: M. Bento Soares, Ph.D. cDNA Library Arrayed by: Greg Lennon, Ph.D. DNA Sequencing by: Washington University Genome Sequencing Center
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mmalla; Butheria; Primates; Catarrhini; Hominidae; Homo
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/clone="IMAGE:1534856"
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Phillips,N.C. and Filion,M.C.
Pherapeutically useful synthetic oligonucleotides Patent; WO 0144465-A 45 21-JUN-2001;
Bioniche Life Sciences Inc. (CA)
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Sequence 45 from Patent WO0144465.
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AX152421 Sequence
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AR029861 Sequence AR029864 Sequence AR029865 Sequence AR029932 Sequence

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THE USE OF MODULAR OLIGONUCLEOTIDES AS ACID BASED ASSAY
Patent: WO 9813522-A 8 02-APR-1998;
DZIEGLEWSKA HANNA EVA (GB)
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A70954
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Novel plant glucosidase i and use thereof for producing recombinant Novel plant modified glycosylation proteins with modified glycosylation Patent: WO 0181591-A 6 01-NOV-2001; INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE (INRA) (FR); CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS) (FR)
                                                                                                                                                                                                unidentified
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Immunostimulatory nucleic acids
Patent: WO 0122972-A 6 05-APR-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Coley Pharmaceutical
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1 (bases 1 to 9)
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Sequence 6 from Patent WO0122972.
AX103814
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Immunostimulatory nucleic acids
Patent: WO 0122972-A 5 05-APR-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Coley Pharmaceutical
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Sequence 5 from Patent WO0122972
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Sequence 41 from Patent W00159450.
AX214433
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Sequence 27 from Patent W00183751.
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Sequence 2 from Patent WO0183793.
AX320671
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wolffe, A.P. and Collingwood, T.
Targeted modification of chromatin structure
Patent: WO 0183793-A 2 08-00V-2001;
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                                     Patent: WO 0197843-A 419 27-DEC-2001; UNIVERSITY OF IOWA RESEARCH FOUNDATION
                                                                                       Weiner, G.
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                                                                                                  Patent: US 5861246-A 29 19-JAN-1999;
                                                                                                                    1 (bases 1 to 10) Weissman, S.M., Nallur, G.N. and Kulkarni, P. Multiple selection process for binding sites
                                                                                                                                                                     Unknown
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      Similarity 6; Conserv
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UNIVERSITY OF IOWA RESEARCH FOUNDATION (US)
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Methods for enhancing antibody-induced cell lysis and treating
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Sequence 420 from Patent WO0197843.
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/note="Synthetic oligonucleotide~phosphorothioate
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                     Sequence 349 from patent US 5837832. AR058772
          AR058772.1 GI:5984349
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AR058771
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ORGANISM Unknown.

ORGANISM Unknown.

Unclassified.
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AUTHORS Chee, M., Cronin, M.T., Fodor, S.P.A., Huang, X.X., Hubbell, E.A.,
Lipshutz, R.J., Lobban, P.E., Morris, M.S. and Sheldon, E.L.

TITLE Lipshutz, R.J., Lobban, P.E., Morris, M.S. and Sheldon, E.L.

TITLE Arrays of nucleic acid probes on biological chips
JOURNAL Patent: US 583782-A 349 17-NOV-1998;
FEATURES Location/Qualifiers
Source /organism="unknown"

BASE COUNT 0 a 7 c 1 g 2 t

ORIGIN 100.0%; Score 6; DB 6; Length 10;
Best Local Similarity 100.0%; Score 6; No. 9.7e+06;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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/cgn2_6/ptodata/2/ina/6B_COMB.seq:*
/cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/2/ina/backfiles1.seq:*
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       US-08-187-749-11
US-09-069-434-13
US-09-069-434-13
US-09-069-434-13
PCT-USS9-01104-11
US-08-605-163-6
US-07-963-723A-3
US-08-441-887A-348
US-08-441-887A-350
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US-08-441-887A-351
US-08-441-887A-351
US-08-906-691-19
PCT-USS9-10072-3
US-08-441-887A-353
US-08-441-887A-28
US-08-413-887A-28
US-08-413-489C-54
US-08-173-489C-53
US-08-173-489C-123
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97.910 Million cell updates/sec
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Sequence 12,
Sequence 13,
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Sequence 6, A
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58, Appl
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53, Appl
54, Appl
121, App
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US-08-863-028-12	US-08-863-028-10	US-08-441-887A-339	US-08-441-887A-338	US-08-441-887A-337	US-08-441-887A-336	US-08-441-887A-335	US-08-858-767-12	US-08-858-767-10	US-08-408-656-3	US-08-408-656-2	US-08-408-656-1	US-08-214-603-12	US-08-049-283A-3	US-08-149-199-12	US-07-974-447-12	US-09-009-490A-95	US-08-173-489C-195
Sequence 12, Appl	Sequence 10, Appl	•	Sequence 338, App	•	Sequence 336, App	•		Sequence 10, Appl		Sequence 2, Appli	Sequence 1, Appli	Sequence 12, Appl	Sequence 3, Appli	Sequence 12, Appl	Sequence 12, Appl	Sequence 95, Appl	Sequence 195, App

### ALIGNMENTS

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Sequence 11, Application US/08187/49
Patent No. 5525470
GENERAL INFORMATION:
APPLICANT: Cohen, S. Aharon,
APPLICANT: Ott, Christopher M.
TITLE OF INVENTION: DNA Sequencial
TITLE OF INVENTION: High Pressure
TITLE OF INVENTION: Electrophores
TITLE OF INVENTION: Electrophores
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Query Match
Best Local Similarity
"---hes 6; Conserve
                                                                                 ; ANTI-SENSE: US-08-187-749-11
                                                                                                                                                                                                                                     TELEPHONE: 617-330-13
TELEFAX: 617-330-1311
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                               MOLECULE N
HYPOTHETICAL: N
                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 617-330-1300
                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION: NAME: Kerner, Ann-Louise
                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                 MOLECULE TYPE:
                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: Patentin Palana
                                                                                                                                                                                                                                                                                                         NAME: Kerner, Ann-Louise REGISTRATION NUMBER: 33, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Boston
STATE: Massac
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET:
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                                                                                                                                                    TOPOLOGY: linear
                                                                                                                                                                                    TYPE: nucleic acid
                                                                                                                                                                                                      LENGTH:
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                                                                                                                                                                                                      8 base pairs
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200 State Street
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US-09-069-434-12
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Patent No. 6
                                  GENERAL INFORMATION:
APPLICANT: HARDIN, Susan H.
APPLICANT: YING, Jun
APPLICANT: JONES, Leslie Burgan
APPLICANT: JONES, Leslie Burgan
TITLE OF INVENTION: DNA Replication Templates Stabilized by
TITLE OF INVENTION: Guanine Quartets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 713/651-5246
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: 'Clesc = "Oligonucleotide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: HARDIN, Susan H.
APPLICANT: YING, Jun
APPLICANT: JONES, Leslie Burgan
TITLE OF INVENTION: DNA Replication Templates Stabilized by
TITLE OF INVENTION: Guanine Quartets
NUMBER OF SEQUENCES: 23
                NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION: TELEPHONE: 713/651-5144
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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ATTORNEY/AGENT INFORMATION:
NAME: DAVIDSON, ROSS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 8 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                   Local Similarity
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Fulbright & Jaworski L.L.P.
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Pred. No.
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Best Local Similarity 100.0%; F
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: otl
DESCRIPTION: /do
HYPOTHETICAL: NO
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
COMPUTER: IBM PC com
              ATTORNEY/AGENT INFORMATION:
NAME: DAVIDSON, Ross E.
REGISTRATION NUMBER: P-4
                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: HARDIN, Susan H.
APPLICANT: YING, Jun
APPLICANT: JONES, Leslie Burgan
                                                                                                                      CURRENT APPLICATION DATA:
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LENGTH: 8 base pairs
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NAME: DAVIDSON, ROSS E.
REGISTRATION NUMBER: P-4
                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: DNA Replication Templates Stabilized by TITLE OF INVENTION: Guanine Quartets NUMBER OF SEQUENCES: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
                                                                                                                                       COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0
                                                                                                                                                                                                                              COUNTRY: U.S.A. ZIP: 77010-3095
                                                                                                                                                                                                                                                                   CITY: Houston
STATE: Texas
 REFERENCE/DOCKET NUMBER:
                                                                    CLASSIFICATION:
                                                                                         FILING DATE:
                                                                                                     APPLICATION NUMBER:
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CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/09/069,434
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1301 McKinney, Suite 5100
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                                                                                                                                       PatentIn Release #1.0, Version #1.30
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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/desc = "Oligonucleotide"
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                P-41,698
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P-01480US0
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                                                                                               PCT-US95-01104-11
                                                                                                                                                                                                                                    NAME: Kerner, Ann-Louise
REGISTRATION NUMBER: 33,523
REFERENCE, DOCKET NUMBER: HYZ-
TELECOMMUNICATION INFORMATION:
TELEPIONE: 617-330-1310
TELEPIAX: 617-330-1311
INFORMATION FOR SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 11, Application PC/TUS9501104
GENERAL INFORMATION:
APPLICANT: Cohen, S. Aharon,
APPLICANT: Belenky, Alexei and
APPLICANT: Ort, Christopher M.
TITLE OF INVENTION: A Method of Sequencing
TITLE OF INVENTION: Short Oligonucleotides
NUMBER OF SEQUENCES: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local :
                           Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 6; Conservative 0
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TELEFAX: 713/651-5246
INFORMATION FOR SEQ ID NO: 13:
                                                                                                          MOLECULE TYPE:
HYPOTHETICAL: N
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                               PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/0117.
FILING DATE:
CLASSITET.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: other nucleic acid DESCRIPTION: /desc = "Oligonucleotide"
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                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Kerner ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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ANTI-SENSE: N
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                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 8 base pairs
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TYPE: nucleic acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Boston
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                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                       TYPE: nucleic acid
STRANDEDNESS: sing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
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   1 GGGAGG 6
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200 State Street
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Pred. No.
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                                               DB 5; Le
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2.8e+07
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 0598
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 408-4400
TELEPAX: (202) 408-4400
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                 Sequence 3, Application US/07963723A Patent No. 5494794
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          GENERAL INFORMATION:
APPLICANT: Wallace,
APPLICANT: Wallace,
TITLE OF INVENTION: Detection of Mitochondrial DNA Mutations
TITLE OF INVENTION: Associated with Alzheimer's Disease and F
TITLE OF INVENTION: Disease
NUMBER OF SEQUENCES:
ADDRESSEE: Needle & Rosenberg, P.C.
ADDRESSEE: Needle & Rosenberg, P.C.
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOSTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/605,163
FILING DATE: 08-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 2. CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Method for Detecting Molecules
TITLE OF INVENTION: Containing Nucleotide Mismatches and the Location of These
TITLE OF INVENTION: Mismatches, and Application to the Detection of Base
TITLE OF INVENTION: Substitutions or Deletions in Nucleotide Sequences.
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APPLICANT: Tosi, Mario
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nes 6; Conserv
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TOPOLOGY: lir
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1300 I Street, N.W.
133 Carnegie Way, N.W., Suite 400
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                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA (genomic)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  single
                                                                                                    Associated with Alzheimer's Disease and Parkinson's
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RESULT 8
US-08-441-887A-96
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TELEPAX: (404) 688-9880
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 96,
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/O
FILING DATE: 16-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
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APPLICANT:
APPLICANT:
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APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
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ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, 8th Floor
CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                      APPLICANT: Lipshutz, Robert J.
APPLICANT: Lobban, Peter E.
APPLICANT: Morris, Macdonald S.
APPLICANT: Sheldon, Edward L.
TITLE OF INVENTION: Arrays of Nucleic Acid Probes on
TITLE OF INVENTION: Biological Chips
NUMBER OF SEQUENCES: 360
                                                                                                                                                                              COMPUTER READABLE FORM:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (404) 688-0770
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STRANDEDNESS: single
TOPOLOGY: linear
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/963,723A
FILING DATE: 19921020
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CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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ZIP: 30301
                                                                                                                         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                 STATE: California
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OPERATING SYSTEM: PC-DOS/MS-DOS
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5837832
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Fodor, Stephen P.A. Huang, Xiaohua X. Hubbell, Earl A.
                                                                                                     PatentIn Release #1.0, Version #1.25
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                                                       16-MAY-1995
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                                                                     US/08/441,887A
   US 08/143,312
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Pred. No.
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US-08-441-887A-348/c; Sequence 348, Application US/08441887A; Patent No. 5837832
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Best Local :
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
APPLICATION NUMBER: US 08/082
FILING DATE: 25-UUN-1993
ATTORNEY/AGENT INFORMATION:
NAME: Liebeschuetz, Joseph O.
REGISTRATION NUMBER: 37,505
                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/143,312
FILING DATE: 26-OCT-1993
                                                                                                                                                                                      CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
FILING DATE: 16-MAY-199
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lobban, Peter E.
APPLICANT: Morris, Macdonald S.
APPLICANT: Sheldon, Edward L.
TITLE OF INVENTION: Arrays of Nucleic Acid Probes on
TITLE OF INVENTION: Biological Chips
NUMBER OF SEQUENCES: 360
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APPLICANT:
                                                                                         CLASSIFICATION: 435
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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ADDRESSEE: Townsend and Townsend and Crew LLP
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APPLICATION NUMBER: US 0:
FILING DATE: 25-JUN-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
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TOPOLOGY: linear
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REGISTRATION NUMBER: 37,505
REFERENCE/DOCKET NUMBER: 018547-004160US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
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Lipshutz, Robert J.
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                                                                         US 08/082,937
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REFERENCE/DOCKET NUMBER: 018547-004160US

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US-08-441-887A-349/c
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APPLICANT: Chee, Mark
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                                     INFORMATION FOR SEQ ID NO: 349:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Lobban, Peter E.
APPLICANT: Morris, Macdonald S.
APPLICANT: Sheldon, Edward L.
TITLE OF INVENTION: Arrays of Nucleic Acid Probes on
TITLE OF INVENTION: Biological Chips
NUMBER OF SEQUENCES: 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
                                                                 NAME: Liebeschuetz, Joseph O. REGISTRATION NUMBER: 37,505
REFERENCE/DOCKET NUMBER: 0185/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-326-2400
                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: 1i
MOLECULE TYPE:
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                                                                                                                                                                                     CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: US 08/082,937
                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/441,887/
FILING DATE: 16-WAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/143,312
FILING DATE: 26-OCT-1993
                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                   SEQUENCE CHARACTERISTICS:
                                                                                                                                       FILING DATE: 25-JUN-1993
ATTORNEY/AGENT INFORMATION:
NAME: Liebeschuetz, Jose
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OPERATING SYSTEM: PC-DOS/MS-DOS
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   LENGTH:
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o. 5837832
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San Francisco
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nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 California
10 base pairs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
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                                                       650-326-242
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                                                                                                       018547-004160US
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Pred. No. 3.9e+04;
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US-08-441-887A-350/c; Sequence 350, Application US/08441887A; Patent No. 5837832
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                                                               ; STRANDEDNESS:
; TOPOLOGY: lir
; MOLECULE TYPE:
US-08-441-887A-350
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Query Match
Best Local S
Matches 6
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Best Local Similarity
Matches 6; Conserv
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                                                                                                                                                           INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                  FILING DATE: 26-OCT-1993
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08,
FILING DATE: 25-JUN-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Morris, Macdonald S.

APPLICANT: Sheldon, Edward L.

TITLE OF INVENTION: Arrays of Nucleic Acid Probes on
TITLE OF INVENTION: Biological Chine
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TOPOLOGY: lir
MOLECULE TYPE:
                                                                                                                                                                                                        NAME: Liebeschuetz, Joseph O. REGISTRATION NUMBER: 37,505
REFERENCE/DOCKET NUMBER: 0185-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-326-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSE: Townsend and Townsend and Crew LLP
                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/143,312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
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CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 16-MAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                           TYPE: nucleic acid
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6; Conserv
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                                                                                                                                            10 base pairs
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   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lipshutz, Robert J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                               linear
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                                                                              DNA (probe)
                                                                                                            single
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100.0%; Score 6; DB 2; L
100.0%; Pred. No. 3.9e+04;
Live 0; Mismatches 0;
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RESULT 13
US-08-590-571-29
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US-08-441-887A-351/c
                                                                                                                                                                                                    US-08-441-887A-351
                                                                                                                                    Matches
                                                                                                                                                Query Match
Best Local Similarity
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APPLICANT: Sheldon, Edward L.
TITLE OF INVENTION: Arrays of Nucleic Acid Probes
TITLE OF INVENTION: Biological Chips
NUMBER OF SEQUENCES: 360
CORRESPONDENCE ADDRESS:
ADDRESSE: Townsend and Townsend and Crew LLP
                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 10 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                  NAME: Liebeschuetz, Joseph O.
REGISTRATION NUMBER: 37,505
REFERENCE/DOCKET NUMBER: 018547-004160US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-326-2420
TELEFAX: 650-326-2422
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MEDIUM TYPE: Floppy disk
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APPLICATION NUMBER: US 08/082,937
FILING DATE: 25-JUN-1993
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APPLICATION NUMBER: US 08/143,312
FILING DATE: 26-0CT-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/441,887A FILING DATE: 16-MAY-1995 CLASSIFICATION: 435
                                                                  10 GGGAGG 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 26 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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CITY: San Francisco
                                                                                                 1 GGGAGG 6
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                                                                                                                                  Conservative
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Morris, Macdonald S.
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Hubbell, Earl A.
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                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                 DNA (probe)
                                                                                                                                                                                                                                                  single
                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Maureen T.
                                                                                                                                  0;
                                                                                                                                Score 6; DB Pred. No. 3.9 0; Mismatches
                                                                                                                                                DB 2;
. 3.9e+04
                                                                                                                                  0; Indels
                                                                                                                                                                Length 10
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                                                                                                                                  Gaps
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RESULT 14
US-08-906-691-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                          COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: TEM PC compatible
COMPUTER: DC-DOS/MS-DOS
OPERATING SYSTEM: DC-DOS/MS-DOS
              SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/906,691
                                                                                                                                                                                                                                                                                                      APPLICANT: Weissman, Sherman M.
APPLICANT: Nallur, Girish N.
APPLICANT: Kulkarni, Prakash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: George M. Yahwak
REGISTRATION NUMBER: 26,824
REFERENCE/DOCKET NUMBER: Ya.
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Microsoft Word 5.1 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                       COUNTRY: US. ZIP: 981094
                                                                                                                                                                  CITY: Seattle
STATE: Washington
                                                                                                                                                                                                       STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 25 SKY
CITY: Trumbul
FILING DATE:
                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE:
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                                                                                                                                                                                                                                                                                                                                                                                              Application US/08906691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Yahwak & Associates
25 Skytop Drive
                                                                                                                                                                                                       6300 Columbia Center,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sherman Weissman and Girish N. Nallur VENTION: MULTIPLE SELECTION PROCESS
                                                                                                                                                     USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (203)268-1951
                                                                                                                                                                                                                         SEED and BERRY LLP
 31-JUL-1997
                                                                                                                                                                                                                                                                         MULTIPLEX SELECTION TECHNIQUE FOR IDENTIFYING PROTEIN-BINDING SITES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 6; DB
100.0%; Pred. No. 3.
tive 0; Mismatches
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RESULT 15

PCTT-US93-10072-3/c

Sequence 3, Application PC/TUS9310072

GENERAL INFORMATION:

APPLICANT:

TITLE OF INVENTION: "DETECTION OF MITOCHONDRIAL DNA TITLE OF INVENTION: MUTATIONS

TITLE OF INVENTION: DISEASE"

NUMBER OF SEQUENCES: 3

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25 EPO

CURRENT APPLICATION NUMBER: PCT/US93/10072

FILING DATE: 20-OCT-1993

PRIOR APPLICATION NUMBER: DS7/963,723

FILING DATE: 20-OCT-1992

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 10 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: nucleic acid
STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-906-691-19
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Search completed: October 30, 2002, 09:01:05 Job time: 16.0526 secs
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Best Local Similarity 100.0%; Pred. No. 3.9e+04;
Matches 6; Conservative 0; Mismatches 0;
                                                                                                                                                  Best Local Similarity Matches 6; Conserv
                                                                                                                                                                                       Query Match
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TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: NO. 6066452tenburg ph.D., Carol
REGISTRATION NUMBER: 39,317
REFERENCE/DOCKET NUMBER: 390036,403C1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206),622-4900
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| GGGAGG 4
                                                                                                                  1 GGGAGG 6
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                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "DETECTION OF MITOCHONDRIAL DNA MUTATIONS ASSOCIATED WITH ALZHEIMER'S DISEASE AND PARKINSON'S DISEASE"
                                                                                                                                                                      100.0%; Score 6; DB 5; L
100.0%; Pred. No. 3.9e+04;
                                                                                                                                                    0;
                                                                                                                                                      Mismatches
                                                                                                                                                                                           Length 10;
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Perfect score:
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              N_Geneseq_032802:*
1: /SIDS1/gcgdata/gc22: /SIDS1/gcgdata/gc33: /SIDS1/gcgdata/gc44: /SIDS1/gcgdata/gc5: /SIDS1/gcgdata/gc6: /SIDS1/gcgdata/gc6: /SIDS1/gcgdata/gc9: /SIDS1/gcgdata/gc9: /SIDS1/gcgdata/lc6: /
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SIDSI/gcgdata/geneseq/geneseqn-embl/NA1980.DAT: *
SIDSI/gcgdata/geneseq/geneseqn-embl/NA1982.DAT: *
SIDSI/gcgdata/geneseq/geneseqn-embl/NA1982.DAT: *
SIDSI/gcgdata/geneseq/geneseqn-embl/NA1982.DAT: *
SIDSI/gcgdata/geneseq/geneseqn-embl/NA1983.DAT: *
SIDSI/gcgdata/geneseq/geneseqn-embl/NA1985.DAT: *
SIDSI/gcgdata/geneseq/geneseqn-embl/NA1990.DAT: *
SIDSI/gcgdata/geneseq/geneseqn-embl/NA1991.DAT: *
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Copyright (c) 1993 - 2002 Compugen Ltd.
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h 100%
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

9	8	c 7	c 6	G	. 4	ω	2	1	No.	Result
6	6	σ	6	6	6	6	6	6	Score	
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	Match	Query
10	9	9	9	9	9	8	8	80	Match Length DB	
13	22	19	18	18	13	21	21	21	Ë	
AAQ25520	AAD15357	AAV28792	AAT80313	AAT80306	AAQ25521	AAZ56812	AAZ56811	AAZ56810	ID	
Antisense nucleic	Human KCA4 dene ta	HCV isolating modu	Oligo HCV-193, tar	Oligo HCV-186, tar	Antisense nucleic	Asub variant oligo	Asub variant oligo	Asub variant oligo	Description	

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21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	2	21	19	18	16	15	15
AAZ82355	AA282177	AA282131	AAZ82099	AAZ81925	AAZ81824	AAZ81666	AAZ81588	AAZ81562	AAZ81472	AAZ81223	AAZ79834	AAZ79748	AA279555	AAZ79354	AAZ79339	AAZ79049	AA278869	AA278790	AAZ78737	AAZ78232	AAZ78160	AAZ78095	AAZ77707	AAZ77620	AAZ61450	AAA56547	AAA56520	AAA61013	AAC60708	AAC68262	AAV35963	AAT98848	AAQ88493	AAQ79358	AAQ64610
ic	Metastatic breast	Metastatic breast	breas	Metastatic breast	Metastatic breast	ic breas	C.	Metastatic breast			ct	colon pref		dendritic		Human dendritic ce			dendritic		Human dendritic ce			tic c		Human macrophage g	Human macrophage g	Protein binding se	ucleot	PPA t	Primer used in RAP	Binding site BSN6	hondr		Alzheimer's/Parkin

## ALIGNMENTS

DI	XX AC	Χt	AAZE	RESULT
25-APR-2000	AAZ56810;	AAZS6810	AAZ56810	JLT 1
000 (first	•	standard;		
t entry)		DNA;		
Ϋ́		α	•	
_		BP.		

Therapeutic; antagonist; high intensity data; HID; HIV-1; integrase; cancer; DNA polymerase; telomerase; aging process; primer; ss.

Asub variant oligonucleotide primer

14

(UYHO-) UNIV HOUSTON US6017709-A. 29-APR-1998; 29-APR-1998; 25-JAN-2000. Synthetic. SH, Jones LB, 98US-0069434 98US-0069434. Ying J;

Screening for therapeutic agents which modulate non-Watson-Crick guanine quartet formation comprises measuring the amount of high intensity data produced by guanine-rich oligonucleotides in the

WPI; 2000-136671/12.

presence

of candidate agents

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RESULT 2
AAZ56811
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CC -rich oligonucleotide (ON) structures. The method comprises: (a) priming CC a sequence reaction, in the presence of a test agent, with an ON where CC the ON forms a non-Watson-Crick structure and produces high intensity CC data (HID); and (b) measuring the amount of HID production where a CC activity, and an increase in the HID is indicative of antagonistic CC activity. The agents could then be used to modulate guantne quartets CC formations which are involved in HIV-1 integrase inhibition, synapsis CC formation during melosis and telomeric maintenance. The method can be conditied for determining the susceptibility to cancer by measuring the CC level of DNA polymerase activity at a quartet stabilized template. The CC promote the elongation of telomerases by the action of DNA polymerases are conditied for determining the conservation of the process. The present sequence represents CC and therefore inhibit the aging process. The present sequence represents CC and therefore inhibit the aging process. The method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention provides a method of screening for potential therapeutic agents which have antagonistic or agonistic activity for the formation of non-Watson-Crick guanine quartets that stabilize higher order guani-rich oligonucleotide (ON) structures. The method comprises: (a) primi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim
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                                                                                                                                                                                                                                                                                                                                       US6017709-A
                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                               cancer;
                                                                                                                                                                                                                                                                                                                                                                                                             Therapeutic;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Asub variant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAZ56811 standard;
                                                                                                  Screening for therapeutic agents which modulate non-Watson-Crick guanine quartet formation comprises measuring the amount of high intensity data produced by guanine-rich oligonucleotides in the
                                                                                                                                                                                                                                                                             29-APR-1998;
                                                                                                                                                             WPI;
                                                                                                                                                                                                                    (UYHO-) UNIV HOUSTON
                                                                                                                                                                                                                                                  29-APR-1998;
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                                                                                    y data produced by guanine-rich oligonucleotides of candidate agents -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      œ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                          Jones LB,
                                                                                                                                                                                                                                                                                                                                                                                               polymerase;
                                                                                                                                                                                                                                                                                                                                                                                                           antagonist;
                                                                                                                                                                                                                                                                                                                                                                                                                                         oligonucleotide primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                 98US-0069434
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              æ
                                                                                                                                                                                                                                                                                                                                                                                               telomerase;
                                                                                                                                                                                                                                                                                                                                                                                            high intensity data; HID; HIV-1; integrase; telomerase; aging process; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                          4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 6;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0 U; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                           P2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2e+08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 8;
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The invention provides a method of screening for potential therapeutic agents which have antagonistic or agonistic activity for the formation of non-Watson-Crick guanine quartets that stabilize higher order guanine

Claim 5; Column 4; 20pp; English.

The invention provides a method of screening for potential therapeutic agents which have antagonistic or agonistic activity for the formation of non-Watson-Crick quantine quartets that stabilize higher order guanine rich oligonucleotide (ON) structures. The method comprises: (a) priming a sequence reaction, in the presence of a test agent, with an ON where

-rich oligonucleotide (ON) structures. The method comprises: (a) pri a sequence reaction, in the presence of a test agent, with an ON whe the ON forms a non-Watson-Crick structure and produces high intensit data (HID); and (b) measuring the amount of HID production where a decrease in or elimination of the HID is indicative of antagonistic activity, and an increase in the HID is indicative of agonistic activity. The agents could then be used to modulate guanine quartets

intensity

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RESULT 3
AAZ56812
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-rich oligonucleotide (ON) structures. The method comprises: (a) priming a sequence reaction, in the presence of a test agent, with an ON where the ON forms a non-Watson-Crick structure and produces high intensity data (HID); and (b) measuring the amount of HID production where a cerivity, and an increase in the HID is indicative of antagonistic activity. The agents could then be used to modulate guanine quartets formations which are involved in HIV-1 integrase inhibition, synapsis committed for determining the susceptibility to cancer by measuring the committed for determining the susceptibility to cancer by measuring the level of DNA polymerase activity at a quartet stabilized template. The constitute of DNA polymerase activity at a quartet stabilized template. The promote the elongation of telomerases by the action of DNA polymerases and therefore inhibit the aging process. The present sequence represents and therefore inhibit the aging process. The present sequence represents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                   Screening for therapeutic agents which modulate non-Watson-Crick guanine quartet formation comprises measuring the amount of high intensity data produced by guanine-rich oligonucleotides in the
                                                                                                                                                                                                                                        WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Asub variant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAZ56812 standard; DNA; 8 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 8 BP; 2
                                                                                                                                              Claim 5;
                                                                                                                                                                                                                                                                    Hardin SH, Jones LB,
                                                                                                                                                                                                                                                                                                                                                                          25-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                    US6017709-A
                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Therapeutic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ56812;
                                                                                                                                                                                                                                                                                                                       29-APR-1998;
                                                                                                                                                                                                                                                                                                                                                29-APR-1998;
                                                                                                                                                                                                                                                                                           (UYHO-) UNIV HOUSTON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGAGG
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                                                                                                                                                                                                                                         2000-136671/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                               Column 4;
                                                                                                                                                                        of candidate agents -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7
                                                                                                                                                                                                                                                                                                                                                                                                                                                      antagonist; high intensity data; HID; HIV-1;
polymerase; telomerase; aging process; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             oligonucleotide primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                       98US-0069434.
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                                                                                                                                             20pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0 C;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 G; 0 U; 0 other;
                                                                                                                                               English.
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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2e+08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HIV-1; integrase;
                                                                                                                                                                                        of high
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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RESULT 4
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Best Local S
Matches 6
                                                            Query Match
Best Local
                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            formations which are involved in HIV-1 integrase inhibition, synapsis formation during meiosis and telomeric maintenance. The method can be modified for determining the susceptibility to cancer by measuring the level of DNA polymerase activity at a quartet stabilized template. The ONS, capable of forming a non-Watson-Crick structure and HID, are used to promote the elongation of telomerases by the action of DNA polymerases and therefore inhibit the aging process. The present sequence represents a guanine-rich oligo that can be used in the method of the invention.
                                                                                                                               The sequences given in AAQ25502-21 are nucleic acid derivatives which are complementary to either a viral or a tumor gene ie. the sequence is complementary to the HIV gene at 7947-7975 on the viral genome or to the ras or c-myb oncogenes. These derivatives are useful as anticancer and antiviral agents, esp. for the treatment of AIDS and AIDS-related complex. They may be given orally or parenterally. The derivatives were tritiated so that they could be monitored
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HIV;
                                                                                                 Sequence 9
                                                                                                                                                                                                                                         Claim 79;
                                                                                                                                                                                                                                                                                                      WPI; 1992-200131/24.
                                                                                                                                                                                                                                                                                                                                                                                                       18-NOV-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-DEC-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ25521 standard; DNA; 9 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 8 BP; 2 A;
                                                                                                                                                                                                                                                                          New antiviral and antitumoural antisense nucleic acid derivs.
                                                                                                                                                                                                                                                                                                                                                                                20-NOV-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                29-MAY-1992.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         W09208729-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense nucleic acid derivative 20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ25521;
                                                                                                                                                                                                                                                                                                                                                       (SANY ) SANKYO CO LTD.
                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GGGAGG
  N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGGAGG 6
                        1 GGGAGG
IIIIIII
                                                                                                                                                                                                                                                               for treating AIDS and AIDS-related
                                                 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity 6; Conserv
                                                                                                                                                                                                                                                                                                                              Ξ
                                                                                                                                                                                                                                      Page 201; 235pp; Tapanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         c-myb;
                                                                                                 BP;
                        σ
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                                                 Conservative
                                                                                                                                                                                                                                                                                                                             Hotoda H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                1 A;
                                                                                                                                                                                                                                                                                                                                                                                90JP-0315007
                                                                                                                                                                                                                                                                                                                                                                                                       91WO-JP01572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AIDS-related complex;
                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0 C; 6 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; S
100.0%; F
ative 0;
                                                          100.0%;
                                                                                                C; 6 G;
                                                                                                                                                                                                                                                                                                                              Kaneko M,
                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 6;
Pred. No.
                                                            Score 6;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0 U; 0 other;
                                                                                                2 T; 0 other;
                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                             Momota K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 21;
                                                                          DB 13;
                                                            1.8e+08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2e+08;
                                                                                                                                                                                                                                                              complex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                             Takiguchi Y;
                                                                       Length 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 8;
                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                              0;
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                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                              0;
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RESULT 5
ADT80306
ID ADT8
XX AT8
XX AT8
XX AT8
XX Comp
DT 16-0
DE Olig
XX Comp
KW Inhi
KW acut
XX Synt
XX EFT modi
FT modi
AAT80313/c
ID AAT803
XX
AC AAT803
XC AAT803
XX
DT 16-OCT
XX
DE Oligo
                                                                                                                                                                                               Дb
                                                                                                                                                                                                                            Q
                                                                                                                                          RESULT 6
                                                                                                                                                                                                                                                                                   Query Match
Best Local s
                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                    The sequences given in AAT80211-382 represent synthetic oligonucleotides which are complementary to a portion of the 5' untranslated region (UTR) of hepatitis C virus (HCV). These sequences may be used in a pharmaceutical composition for the control or prevention of HCV infection. They may be used to inhibit replication or expression of HCV or for detecting the presence of HCV in a sample. They may be used to inhibit HCV replication in a cell and are therefor useful in the treatment of HCV infections such as chronic and acute hepatitis and
                                                                        AAT80313;
                                                                                                         AAT80313 standard; RNA; 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 17; 100pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligo:nucleotide(s) complementary to HCV 5' untranslated region - used in the treatment and detection of HCV infection, esp. hepatitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acute hepatitis; hepatocarcinoma; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oligo HCV-186, targetted to HCV mRNA position -216 to -208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT80306;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAT80306 standard; DNA;
                                                                                                                                                                                                                                                                                                                                    Sequence 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Roberts NA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Frank BL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                          hepatocarcinoma.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nhibition;
                                                                                                                                                                                             4 GGGAGG
                                                                                                                                                                                                                                                                  Local Similarity es 6; Conserv
                                                                                                                                                                                                                                1 GGGAGG 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hepato-carcinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1997-043122/04
                                                                                                                                                                                                                                                                                                                                      BP; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goodchild
                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ry; 5' untranslated region; UTR; hep
replication; expression; detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Roberts PC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95US-0471968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96WO-EP02427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                        Α,
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                                                                                                                                                                                                                                                                                                                                        3 C; 5 G;
                                                                                                                                                                                                                                                                               100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hamlin HA,
Walther DM,
                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                 Score 6;
Pred. No.
                                                                                                                                                                                                                                                                                                                                        0 U; 0 other;
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                                                                                                                                                                                                                                                                    Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kilkuskie RE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wolfe JL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 UTR; hepatitis C virus; HCV;
etection; chronic hepatitis;
                                                                                                                                                                                                                                                                  1.8e+08;
hes 0;
                                                                                                                                                                                                                                                                                                   DB 18;
                                                                                                                                                                                                                                                                                                  Length 9;
                                                                                                                                                                                                                                                                  0;
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Oligo HCV-193, targetted to HCV mRNA position -27 to -19.

16-OCT-1997

(first entry)

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RESULT 7
AAV28792/c
ID AAV287
XX AAV287
AC AAV287
XX O5-AUG
DT 05-AUG
XX HEPATI
KW HEPATI
KW ISOLAT
XX Synthe
OS Synthe
OS HePATI
XX WO9813
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oligo:nucleotide(s) complementary to HCV 5' untranslated region - used in the treatment and detection of HCV infection, esp. hepatitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Complementary; 5' untranslated region; UTR; hepatitis C virus; HCV inhibition; replication; expression; detection; chronic hepatitis; acute hepatitis; hepatocarcinoma; ss.
                                                              Hepatitis C virus; HCV; human immunodeficiency virus; HIV; primer extension product; binding; amplification; primer; c isolation; module; diagnosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 17; 100pp; English.
                                                                                                                 HCV isolating modular oligonucleotide H1-9.
                                                                                                                                             05-AUG-1998
                                                                                                                                                                      AAV28792;
                                                                                                                                                                                            AAV28792 standard;
                                                                                                                                                                                                                                                                                                                                                                 Sequence 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and hepato-carcinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1997-043122/04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Frank BL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W09639500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   modified_base
                                                                                                                                                                                                                                                                                                                                                                                            hepatocarcinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (HOFF ) HOFFMANN LA ROCHE & CO AG (HYBR-) HYBRIDON INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-DEC-1996
                          Hepatitis C virus.
                                                                                                                                                                                                                                                                σ
                                                                                                                                                                                                                                                                                      1 GGGAGG 6
                                                                                                                                                                                                                                                             GGGAGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ä,
                                                                                                                                                                                                                                                                                                               Similarity 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Goodchild J, !
                                                                                                                                                                                                                                                                                                                                                                 BP;
                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                   0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "Comprises phosphorothioate linkages"
                                                                                                                                                                                              DNA; 9 BP
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                                                                                                                                                                                                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                                                                                                                                 C; 3 G; 1 U; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Walther DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hamlin HA,
                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                         Score 6;
Pred. No.
                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kilkuskie RE;
Wolfe JL;
                                                                                                                                                                                                                                                                                                                                         DB 18;
                                                                                                                                                                                                                                                                                                               1.8e+08;
hes 0;
                                                                                                                                                                                                                                                                                                                                      Length 9;
                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HCV;
                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                  RESULT 8
AAD15357
                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                      σ
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CC consecutive nucleotides (nt) to a complementary target nucleic acid in CC a sample. The method comprises binding a complementary modular CC oligonucleotide, having at least 2 parts comprising nt, to adjacent coligonucleotide, having at least 2 parts complementary modular CC oligonucleotide has better binding than a single oligonucleotide (acid the region spanned by the complementary modular CC complementary to the region spanned by the complementary modular CC component of a complementary modular oligonucleotide. The present sequence represents a specifically claimed CC component of a complementary modular oligonucleotides are used as probes or primers, for replication, complification, (reverse) transcription, sequencing, isolation and/or CC detection of the target nucleic acid. Specific applications are CC detection/isolation of hepatitis C virus (HCV), human immunodeficiency virus (HTV), e.g. for diagonosis or monitoring of infections, or (universal) primer extension products, e.g. before electrophoretic separation. Use of the complementary modular oligonucleotides improves CC separation. Use of the complementary before electrophoretic suitable for automation since pre-hybridisation, sample lysis and bead contains and bead contains a complementary modular oligonucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
08-FEB-2001; 2001WO-US04301.
                                  16-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Improving binding of series of nucleotide(s) to complementary target nucleic acid - comprises use of oligo:nucleotide with at least two modules providing more specific or stable binding, useful in, e.g. amplification of target
                                                                    WO200159450-A2
                                                                                                                                    Human; KCA4; EPO; molecular target; zinc finger protein; ZFP; cellular process; signal transduction; drug-screening; ds.
                                                                                                                                                                                      Human KCA4 gene target sequence
                                                                                                                                                                                                                            15-NOV-2001
                                                                                                                                                                                                                                                                                             AAD15357 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 9 BP; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 17; Page 52; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        capture can be combined in a single step.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lundeberg J, Uhlen M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (DYNA-) DYNAL AS.
(DZIE/) DZIEGLEWSKA H
                                                                                                                                                                                                                                                                                                                                                                                                     GGGAGG
                                                                                                                                                                                                                                                                                                                                                                                   GGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                   6
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96GB-0020075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97WO-GB02629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; 5 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 6; DB
Pred. No. 1.8
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB
1.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                   l.8e+08;
s 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
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RESULT 9
AAQ25520
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a method of screening a compound for interaction with a molecular target. The method involves contacting first and second cells with the compound and determining the values of properties of the compound. The second cell comprises an exogenous zinc finger protein (ZFP) that modulates the expression of the molecular target, or isolating membranes from cell comprising ZFP. The methods allow for high the compound and reduces the incidence of the molecular target.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Screening compound for interaction with molecular target by contacting compound with cells, comprising exogenous zinc finger protein that modulates expression of target, and determining values of properties of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             throughput screening of candidate compound and reduces the incidence of false positives. The methods are useful for screening a compound for interaction with a molecular target or for screening a compound for its effect on a cellular process. The method is useful for testing a compound for its capacity to transduce a signal to the molecular target or its capacity to block transduction of a signal through the molecular target, and for performing biochemical drug-screening assays. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 10; Page 73; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Case
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-FEB-2000; 2000US-0181117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 9 BP; 1 A; 1 C; 7 G; 0 U; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequence is a target sequence for human KCa4 gene used in the exemplification of the invention.
                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                           HIV; ras; c-myb;
                                                                                                                                                                                                                                                                                                                          Antisense nucleic acid derivative 19
                                                                                                                                                                                                                                                                                                                                                         01-DEC-1992
                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ25520 standard; DNA; 10
New antiviral and antitumoural antisense nucleic acid derivs. useful for treating AIDS and AIDS-related complex
                                              WPI; 1992-200131/24.
                                                                                                                                       20-NOV-1990;
                                                                                                                                                                    18-NOV-1991;
                                                                                                                                                                                                   29-MAY-1992
                                                                                                                                                                                                                                 W09208729-A
                                                                                                        (SANY ) SANKYO CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity es 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGGAGG 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                           Hotoda H,
                                                                                                                                       90JP-0315007
                                                                                                                                                                    91WO-JP01572
                                                                                                                                                                                                                                                                                             AIDS-related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                             Kaneko
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Pred. No.
                                                                                                                                                                                                                                                                                             complex; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                             Momota
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 22;
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                                                                           ~
                                                                           Takiguchi
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AAQ64610/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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                                                 Query Match
Best Local Similarity
Matches 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 78;
                                                                                                                                                                                                                A 128(956-965) insertion mutation harbours a novel 12S rRNA gene insertion. Direct sequence analysis revealed that the insertion consisted of approximately five cytosines within AAQ64610. This mitochondrial DNA mutation is associated with Alzheimer's and/or parkinson's diseases. The detection of the mutations is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ64610;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     or predicting a pre-disposition to Parkinson's disease in a patient
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Detection of mitochondrial DNA mutation associated with Alzheimer's disease and/or Parkinson's disease for disor predicting a pre-disposition to Alzheimer's disease and the control of th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mitochondrial DNA mutation; associated with Alzheimer's; Parkinson's disease; mismatch primers; PCR; amplificatio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alzheimer's/Parkinsons mitochondrial DNA mutation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1994-151346/18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-OCT-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polymerase chain reaction; ss
                                                                                                          Sequence 10 BP; 0 A;
                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (UYEM-) UNIV EMORY SCHOOL MEDICINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-OCT-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-APR-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
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                                                                                                                                                                 diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Page 200; 235pp; Japanese.
                                                                                                                                                                                        diagnosing or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93WO-US10072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                    83pp; English.
                                                                                                          9 C; 0 G; 1 T; 0 other;
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                                                                                                                                                                                        predicting a pre-disposition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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                            Score 6;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
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                                                      DB 15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.2e+05;
                            3.2e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         amplification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 10;
                                                      Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for diagnosing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                detection
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Conservative

0

Mismatches

Indels

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Gaps

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RESULT 11
AAQ79358/c
ID AAQ79358/c
ID AAQ7938
XX AAQ793
XX Sequen
DE Sequen
DE HEPSLH
KW Erythr
KW Erythr
KW Ss.
OS Synthe
PN WO9423
XX Synthe
PN WO9423
XX IS-APR
PF 15-APR
PF 15-APR
PF 23-JUN
XX IUYNY
XX IUYNY
XX IEG-hu
XX WHI; 1
XX PH IS I
XX IEG-hu
XX I
                                                                                                        RESULT 12
AAQ88493
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                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hEBSLH. This nucleic acid sequence includes EPO coding sequence, a 5/flanking region contg. multiple regulatory elements and a 3/flanking region contg. multiple regulatory elements and a 3/flanking region contg. multiple regulatory elements. AAQ79354 shows the extended 5/flanking region and includes all the 5/regulatory elements. This region, consisting of the first 3892 of AAQ79353, was not found in the 3.6 kb EPO genomic clone from fetal liver reported conting. The flanking region comprises 3992 by and contains can and TATA boxes and att lease 321 potential transcriptional regulatory elements. AAQ79356-Q79362 show several of these elements and their positions. The nucleotide position of these elements is measured from the BamHI site at the 5/end of AAQ79353.
                    AAQ88493;
                                                                    AAQ88493 standard; DNA; 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 10 BP; 0 A; 8 C; 0 G; 2 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ79353 shows the nt. sequence of the entire 9.3 kb genomic clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Table I, p. 12; 81pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New regulatory regions of human erythropoietin gene - used for studying and treating diseases and for prodn. of transgenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1994-341353/42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lee-huang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-APR-1993;
23-JUN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9423570-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (UYNY ) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Erythropoietin; erythropoiesis; red blood cell; regulatory element;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence of AP2 regulatory sequence located at posn. 896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ79358 standard; DNA; 10 BP
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                                                                                                                                                                                                                      10 GGGAGG
                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                               1 GGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGGAGG
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                                                                                                                                                                                                                                                                                                                                                                  Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NEW YORK STATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93US-0046295
93US-0082850
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                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                            Score 6; DB 15;
Pred. No. 3.2e+0
                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                            3.2e+05;
hes 0;
                                                                                                                                                                                                                                                                                                                                                                                 Length 10;
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XX DE XX
                                                                                                                     RESULT 13
AAT98848
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                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                       Query Match
Best Local :
                                                                                                                                                                                                                                                                                           A DNA chip was prepared for analysing sequences contained in a 1.3kb fragment of human mitochondrial DNA from the D-loop region, the most polymorphic region of human mitochondrial DNA. The chip comprised a set of 268 overlapping oligonucleotide probes (see AAQ88421-Q88684) of varying length (9-14 nucleotides) with varying overlaps arranged in a lcm x lcm array. Each position in the sequence was represented by at least one probe (usually 2 or more). DNA was amplified from six human donors and then transcribed to the chip. For each individual, a unique hybridisation fingerprint was produced on the chip; all differences could be correlated with differences in the cloned genomic DNA sequence.
Protein-binding site isolation; transcription factor modification;
                         Binding site BSN6 identified using the method of the invention.
                                                                                 AAT98848;
                                                                                                        AAT98848 standard; DNA; 10 BP
                                                      20-MAR-1998
                                                                                                                                                                                                                                                                         Sequence 10 BP; 1 A; 1 C; 8 G; 0 U; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 107; 223pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequences with variants
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New arrays of oligo:nucleotide probes -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chee M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (AFFY-) AFFYMAX TECHNOLOGIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-AUG-1994;
26-OCT-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mitochondrial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-OCT-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9511995-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hybridisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tiling strategy; immobilised nucleic acid probe array;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human mitochondrial D-loop region DNA probe 4-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-DEC-1995 (first entry)
                                                                                                                                                                                                                          Local Similarity
nes 6; Conserv
                                                                                                                                                                        5 GGGAGG
                                                                                                                                                                                                 1 GGGAGG 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sheldon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cronin MT,
                                                                                                                                                                        10
                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lipshutz
                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA; D-loop region; biological chip;
fingerprint; interrogation position;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94US-0284064
93US-0143312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94WO-US12305
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                                                                                                                                                                                                                                     100.0%; Score 6; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RJ, Lobban PE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fodor SPA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
"3'-end of probe is covalently attached
to chip surface"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for detection of mutation(s) and
                                                                                                                                                                                                                          0;
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                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gingeras TR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Miyada CG,
                                                                                                                                                                                                                                               DB 16;
                                                                                                                                                                                                                                   3.2e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             used for comparing known
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Huang XC;
G, Morris MS;
                                                                                                                                                                                                                                               Length 10;
                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequencing.
                                                                                                                                                                                                                       0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This sequence represents a binding site identified using the method of CC the invention. This sequence was identified using the 32P-labelled CC oligonuclectide duplex shown in ANT/6581 and the primers shown in CC AAT/6582-T76583 in the method of the invention. The method is for CC simultaneously isolating protein-binding sites for DNA-binding proteins. The method comprises: (a) mixing a set of oligonucleotide (ON) duplexes CC having 5' and 3' sequences capable of annealing to primers for CC amplification and an internal sequence having a potential protein-binding site, a non-specific inhibitor and a sample containing CC complexed with the DNA-binding proteins; (c) amplifying complexed duplexes to form amplified duplexes; thereby isolating protein-binding complexed complexes to form amplified duplexes; thereby isolating protein-binding proteins in an expression library. They can also be used to develop products to inhibit the function of a given DNA-binding protein corresponding complexed to identify corresponding complexes to for the modification of transcription factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Identifying protein-binding sites for DNA-binding proteins - using duplexes having 5' and 3' sequences for annealing to amplification primers with an internal potential protein-binding site sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA-binding
                                                                                                                                                                                  Rapid amplification of polymorphic DNA; RAPD; allele; breeding programme; muscle fibre composition; Duroc pig; meat quality; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                             AAV35963 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 10 BP; 1 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1997-393714/36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          W09727330-A1
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                              16-APR-1998
                                                                            WO9815837-A1
                                                                                                                                                                                                                                                       Primer used in RAPD assay of the invention.
                                                                                                                                                                                                                                                                                                       26-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 3; Page 19; 52pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYYA ) UNIV YALE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GGGAGG 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGAGG 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein; inhibitor identification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96US-0590571
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0 C; 7 G;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 6;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.2e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAC68262
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCR primers AAV35877-996 were used in a rapid amplification of polymorphic DNA (RAPD) reaction in the assay of the invention. This assay is used to determine if an animal has an allele for, or muscle fibre composition (MFC) characteristic of, the Duroc pig. Duroc pigs produce meat of superior quality (particularly tenderness) but are normally less efficient feed converters and fatter than other types. The assay comprises analysing a tissue sample to determine if the genotype comprises analysing a tissue sample to determine if the genotype comprises the allele, and genetic features typical of animals with Duroc-type MFC are present. The method is used to select animals that have Duroc characteristics for use in breeding programmes (to develop the animals with Duroc pig characteristics), and to assess meat quality.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-SEP-1997;
07-OCT-1996;
18-FEB-1997;
20-MAR-1997;
Transgenic non-human animal for gastrointestinal tract specific
                                                                                                                                                                                                                                                                             02-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                              environmental pollution; pig;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAC68262;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAC68262 standard; DNA; 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-OCT-1997;
                                               WPI; 2000-687245/67.
                                                                                        Forsberg CW,
                                                                                                                                                                                     23-APR-1999;
                                                                                                                                                                                                                                20-APR-2000; 2000WO-CA00430
                                                                                                                                                                                                                                                                                                                          WO200064247-A1
                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lama2/APPA transgene adaptor sequence #1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    fibre properties, used
                                                                                                                                     (UYGU-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MEAT-) MEAT & LIVESTOCK COMMISSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10 GGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 GGGAGG 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for alleles or muscle fibre composition characteristic of type pigs - comprises determination of genotype or muscle properties, used to identify animals for breeding programs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Steven J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 1 A; 7 C; 1 G; 1 T; 0 other;
                                                                                                                                       GUELPH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                          Golovan S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97GB-0019002.
96GB-0020904.
97GB-0003350.
97GB-0005796.
                                                                                                                                                                                  99US-0130508
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                                                                                                                                                                                                                                                                                                                                                                                                                                 salivary protein; phytase; phosphorus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 6; DB
100.0%; Pred. No. 3.2
tive 0; Mismatches
                                                                                        Phillips JP;
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                                                                                                                                                  Query Match 100.0%; 9
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Matches 6; Conservative 0;
                                                                                                                                                                                                                                                          The present invention provides transgenic animals which produce desired proteins, in this case pigs which expresses phytase in the salivary gland. Low phytase production levels result in phytate in the diet being excreted and causing phosphorus contamination in water, as well as reducing the growth of animals. The invention provides a number of transgenes containing the E. coli APPA phytase coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 19; 152pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                      expression of a protein, preferably phytase, comprises a nucleic acid sequence including a heterologous transgene construct encoding the protein \, -
                                                                                                                                                                                                                               Sequence 10 BP; 1 A; 1 C; 6 G; 2 T; 0 other;
                                                                       1 GGGAGG 6
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2 GGGAGG 7
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Mismatches 0;
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